

AMENDMENT TO THE SPECIFICATION

Please replace the paragraph appearing on page 4, lines 9-19 with the amended paragraph:

In one embodiment of the invention, clock uncertainty between a receiving cell and a launching cell of a net is estimated by back-tracing a first path from the receiving cell toward the clock source. Each cell in the first path having a predetermined characteristic (e.g., in a critical path) is marked. A second path from the launching cell is back-traced toward the clock source to ~~a predetermined (e.g., first) marked cell~~ ~~one of the marked cells having the predetermined characteristic (e.g., first marked cell)~~. Clock uncertainty is calculated based on ~~the second path from the predetermined delay~~ associated with the first path between the marked cell and the receiving cell.

On page 26, lines 4-21, please amend the abstract as follows:

Clock uncertainty between a receiving cell and a launching cell of a net is estimated by back-tracing a first path from the receiving cell toward the clock source and marking each cell having a predetermined ~~characteristic~~characteristic along the first path. A second path from the launching cell toward the clock source is back-traced to ~~a predetermined one of the marked cells having the predetermined characteristic~~. Clock uncertainty is calculated based on the portion of the first path from the ~~predetermined~~ marked ~~cell~~cell ~~having the predetermined~~characteristic to the receiving cell. Clock uncertainty is calculated if a slack does not exceed a margin value. In one embodiment, a clock net in the form of a tree is optimized by forcing a first buffer to the center of gravity of a plurality of

buffers having nets without timing violations to maximize a common path from the root to the forced buffer and minimize the non-common paths from the forced buffer to the leaves, thereby minimizing clock uncertainty.